

## CHAPTER V – INFRASTRUCTURE

### A. Introduction

Utility service infrastructure such as water, wastewater, gas and electric facilities, and stormwater drainage facilities are essential services needed for the orderly growth and redevelopment of a community. Public safety services, including law enforcement and fire protection are also essential.

According to the City's 1996 General Plan, service infrastructure is satisfactory to accommodate the General Plan land uses and intensity of use. The Specific Plan area is largely built out and though the Specific Plan increases the residential and commercial floor area, with the exception of a portion of the wastewater collection system, Lemon Grove's existing infrastructure framework is considered adequate to service the Specific Plan land uses. For informational purposes, these facilities and public safety services are briefly discussed.

### B. Water Service

The Helix Water District provides water service in Lemon Grove. About 90 percent of the District's water supply originates in northern California or the Colorado River basin, and the remaining ten percent consists of local runoff within the San Diego region. The imported water is purchased from the San Diego County Water Authority, which obtains supplies from the Metropolitan Water District. Water is treated at the R.M. Levy Water Treatment Plant and distributed throughout Lemon Grove. The main components of the local system consist of the 30-million-gallon Grossmont storage tank, the 4-million-gallon Lemon Grove storage tank and a 27-inch transmission line located in Main Street.

Because the Downtown Village Specific Plan area and most of the City is almost completely developed, the District's long-range plans primarily consist of maintaining the water infrastructure. Overall, the distribution lines in

Lemon Grove are in good condition and are adequate to meet the current and future needs of the City.

The capacity of localized portions of the Downtown Village Specific Plan system may require enlargement or replacement to accommodate new development or redevelopment that increases demand needs of the City. Water to fight fires typically requires the most infrastructure. Fire flows within the Downtown Village Specific Plan area are adequate and are currently in the range of 2,500 gallons per minute with 90 pounds per square inch of pressure. The City will require developers to coordinate with Helix Water District and identify necessary improvements. Helix Water District anticipates requiring the extension of approximately 700 feet of waterline to connect an existing water line in School Lane to the water line in Golden Avenue and adding about 500 feet of water line in Olive Street between Central Avenue and Madison Street. To ensure that facilities will not be oversized and induce undesired growth, the City will request that the capacity of new facilities reflect the development levels anticipated by the Downtown Village Specific Plan and General Plan.

### C. Wastewater Service

The Specific Plan area lies entirely within the Lemon Grove Sanitation District, which provides sewer service within the City. The County of San Diego originally staffed and managed the district. When Lemon Grove incorporated in 1977, the City took over responsibility and is now managed by their Engineering Services Department. Sewage is collected and eventually directed to the Point Loma Wastewater Treatment Plant, operated by the City of San Diego Metropolitan Wastewater Department. A comprehensive engineering study was conducted in 1981 and anticipated a higher rate of growth than has been experienced in Lemon Grove, however, some portions of the system, such as trunk sewer lines, exhibit signs of deterioration and need replacement. Recent



blockages in the sewer trunk main between Massachusetts Avenue and the southern city limits have resulted in the discovery that a 4,000-foot section of 12-inch vitrified clay pipe constructed in 1947 has been severely damaged and is currently at capacity. Any significant increase in sewage generation within the Downtown Village Specific Plan will require the existing damaged trunk sewer main to be upsized to 18 inches.

For new development and redevelopment projects, the Lemon Grove Sanitation District, with assistance from the developer, will identify necessary localized infrastructure improvements needed to accommodate any increase in service demand.

### **Storm Drainage**

The project area is located at the northern end of the South Chollas Valley. A tributary of Chollas Creek which trends in a southwesterly direction away from the site. There are no well-defined drainages, divides or ridges on the site, but surface water runoff is generally to the west and toward Lemon Avenue at the western boundary of the project area. Part of the City's existing storm drain system traverses the site from east to west. Redevelopment in existing urbanized areas does not typically increase the volume of stormwater runoff and require an increase in the size of drainage facilities. However, recent changes in stormwater quality standards will require new development or redevelopment to implement measures to improve the quality of stormwater runoff. Developers are required to provide a comprehensive drainage plan. The lowering of the San Diego Trolley will change stormwater runoff patterns and affect existing drainage facilities.

### **D. Power and Telecommunications Facilities**

Electricity and natural gas is provided to the project area by the San Diego Gas & Electric Company (SDG&E). Electricity is transmitted by above ground and underground power lines from the Chollas Substation. Natural gas lines

exist along all major street rights-of-way within the area. SDG&E has indicated that existing gas and electric facilities have adequate capacity to serve the area and future densification. The lowering of the San Diego Trolley will affect existing underground power and gas lines, and will need to be addressed. Additional telecommunication and cellular telephone communications facilities are required to obtain a Conditional Use Permit within the Downtown Village Specific Plan.

### **E. Public Safety**

#### **Law Enforcement**

Law enforcement services within Lemon Grove are provided by the San Diego County Sheriffs Department under contract with the City of Lemon Grove. The Sheriffs substation is located at 3240 Main Street, adjacent to City Hall in the Civic Center District. The response time to the area is 1 minute for priority calls. Priority calls are those that are life-threatening or those with the suspect on the scene. Increases in development intensity and residential density will increase the demand for law enforcement services.

#### **Fire Protection**

Fire protection within the Downtown Village Specific Plan area is provided by the Lemon Grove Fire Department (LGFD) located at 7853 Central Avenue. Staff includes two fully manned engine companies in one station. The LGFD has Automatic Aid agreements with the Cities of San Diego and La Mesa and the San Miguel Fire District. Mutual aid is also provided with the participation of all east county cities. The increased development intensity and height of structures in the Downtown Village Specific Plan may require the purchase of additional types of special equipment designed to operate around mid-rise structures.

